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TITLE: Hormone Receptors in Breast Cancer Prognosis - Racial and Quantitative Effects

PRINCIPAL INVESTIGATOR: Carl Martin Tammemagi, Ph.D.

CONTRACTING ORGANIZATION: Henry Ford Health System  
Detroit, Michigan 48202

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<b>13. ABSTRACT (Maximum 200 Words)</b> Breast cancer survivors compose the largest group of cancer survivors in the United States. As heterogeneity exists within stages and between races in breast cancer survival, it is important to develop a better understanding of prognostic factors. Tumor estrogen and progesterone receptors are one of the more important prognostic factors in breast cancer patients. However, currently in clinical practice hormone receptor status is treated as either being present or absent and is treated similarly in all groups. The dichotomization of hormone status may lead to loss of valuable information and hormone receptor status may not have the same effect in African Americans and Whites. This historical cohort study evaluates quantitative differences in tumor hormone receptors in African Americans and Whites and determines whether survival effects differ between the two groups. This study also assesses whether a dose-response relationship, linear or nonlinear, exists between hormone receptors and survival. Findings of this study may lead to better prediction of survival and to identification of subsets of patients at higher risk that may have gone unrecognized by the application of a single cutpoint. Our preliminary findings indicate that African American breast cancer patients have more estrogen receptor negativity and a worse survival.				
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## INTRODUCTION

Breast cancer survivors compose the largest group of cancer survivors in the United States today. As considerable heterogeneity exists within stages and between racial/ethnic groups in breast cancer survival, it is important to develop a better understanding of prognostic factors. Estrogen and progesterone receptors in breast tumor tissue are regarded to be one of the more important prognostic factors in breast cancer patients. However, currently in clinical practice hormone receptor status is treated as either being present or absent and is treated similarly in all racial/ethnic groups. The dichotomization of hormone status may lead to loss of valuable information and hormone receptor status may not have the same effect in African Americans and whites. This historical cohort study evaluates quantitative differences in estrogen and progesterone receptors in the breast tumors of African Americans and Whites and determines whether survival effects differ between the two groups. This study will also assess whether a dose-response relationship, linear or nonlinear, exists between quantitatively assessed hormone receptors and survival, as opposed to the currently popular dichotomized assessment of receptor status. Findings of this study may lead to better prediction of survival and to identification of subsets of patients needing particular clinical attention that may have gone unrecognized by applying a single cutpoint to all patients.

## BODY

Year two of this three-year study has been completed and the items in the *Statement of Work* that should have been undertaken and/or completed are summarized in Table 1.



**Table 1. Progress on items in the *Statement of Works* (Changes from the 2001 annual report are in bold face type.)**

	<i>Description</i>	<i>Planned time</i>	<i>Progress</i>
Task 1	Initial establishment of study team, approach and issues	1 to 4 months	Completed
	Staff training	1 to 4 months	Completed
	Preparation of computer programs and study database	1 to 4 months	Completed
Task 2	Establish and Characterize Cohort	4 to 8 months	Completed
	<u>Abstraction of Patient / Tumor Data From</u>	4 to 28 months	
	Hormone receptor log book data		Computer entry completed
	Medical record abstraction		815 patients completed (~85%)
	Construction of computer entry system for record abstracted data		Microsoft Access database entry forms written
	Data entry into computer databases		Records for 114 individuals have been entered
Task 3	SES estimates based on 1990 US Census data	12 to 28 months	Continuing
Task 4	Survival Data Collection From		
	Henry Ford Health System Tumor Registry	12 to 28 months	Initial completed, ongoing
	SEER	18 to 28 months	Initial completed, ongoing
	Michigan Death Index	18 to 28 months	Initial completed, ongoing
Task 5	Attend breast cancer conference	Year two	1 Attended / DoD upcoming

The current study staff consists of the following:

Project Staff

C. Martin Tammemagi – Principal Investigator

Chris Neslund-Dudas – Project Manager

Mary Ellen Frebes – Tumor registrar and quality assurance audits

Jonathon Mitchell- Database manager/programmer

Rick Krajenta – Programmer/ tumor registry data specialist

Medical Record Abstractors (Coordinator Ms. Cheryl Spoutz )

Roseanne Rose

Karen Gerula

Mary Beland

Kay McGlynn

Data Entry

Roseanne Rose

Kim Beney

Joan Broderick

Barbara Harkness

Ms. Christine Neslund-Dudas, an Epidemiologist I, is helping manage the study, Mr. Richard Krajenta is in charge of the computer databases and data preparation, and Ms. Cheryl Spoutz heads a team of research abstractors who have a minimum of a two-year college degree in Health Information Management (HIM), have passed National Accreditation Examinations and are credentialed Registered Health Information Technicians (RHIT).

In year two of this study approximately 815 patient records were requested, obtained and abstracted. Incomplete or no records were obtained for 130 individuals after three repeat attempts. We are making vigorous efforts to locate these records.

Ms. Mary Ellen Frebes has joined the study in the last year. She is a certified tumor registrar (National Cancer Registrars Association) with 15 years of experience and is also a RHIT. Her role is to assure the quality of all vital statistics and staging data. She reviews each patient's completed abstract form and verifies all questionable data and

completes incomplete data by accessing data in the Henry Ford Health System (HFHS) Tumor Registry, the Surveillance, Epidemiology and End Results (SEER) Tumor Registry and the Social Security Death Index. Dr. Tammemagi also reviews each completed abstraction form for completeness and consistency. Currently, Dr. Tammemagi is carrying out all statistical analyses.

Jonathon Mitchell, a computer programmer, has written computer data entry forms using Microsoft Access. A representative sampling is presented in Appendix 1. The initial beta version has been tested and upgraded to the mature product in current use. A team of four data entry personnel has been trained. The reliability and accuracy of data entry was evaluated initial and will be re-evaluated at regular intervals. To date, the abstracted data of 114 patients have been entered into the computer database.

The study staff meets biweekly to discuss any issues, problems or concerns. Dr. Tammemagi or Ms. Neslund-Dudas is available to all staff to provide immediate responses to problems as they arise.

All available estrogen and progesterone hormone receptor data for breast cancer patients have been manually transcribed from the laboratory notebooks of the Department of Clinical Biochemistry into a Microsoft Access database. Information pertinent to this study was extracted from the HFHS Tumor Registry and was placed into another Microsoft Access file. Survival data has been collected from the HFHS Tumor Registry. Survival and other relevant clinicopathologic data have been collected from the Detroit SEER Tumor Registry. Also, death data for the breast cancer cohort has been downloaded from the Michigan Death Registry files and includes deaths up until the year 1999.

Socioeconomic status (SES) data was estimated for breast cancer patients in the HFHS Tumor Registry based on patient's address at diagnosis and the block group

medium household income (BGMHI) derived from the 1990 US Census. So far we have obtained SES estimates for approximately 70% of individuals, which is below what we have obtained in several past studies. We are currently assessing updated versions of MapMarker® and MapInfo® geocoding programs useful in providing census-based aggregate estimates of SES. It is anticipated that these programs will provide more complete data as well as a wider range of SES estimators.

We are on track to having all data collection and clean up completed by fall of 2002, whence analysis will begin. Statistical analysis, writing of manuscripts and dissemination of study results are expected to be completed by the end of the third study year, as planned.

This year Dr. Tammemagi attended and presented the following:

Tammemagi CM, C. Neslund-Dudas, M. Simoff, P. Kvale. Comorbidity explains some of the race difference in lung cancer survival. National Institutes of Health / American Cancer Society's Cancer Survivorship: Resilience across the lifespan. June 2, 2002, Washington, D.C.

Although these findings concerns lung cancer survival, they deal with a topic pertinent to the current study of racial/ethnic differences in breast cancer survival. Valid survival studies must take into consideration the effects of important prognostic factors in addition to the one under study. We have recently shown that comorbidity is the third most important predictor of survival in lung cancer patients, following stage and treatment, and it in part explains some of the racial/ethnic difference in lung cancer survival (Appendix 2). We have augmented the data collection procedures for this study to include comorbidity data to make possible assessment and adjustment for comorbidity (Appendix 3).

Dr. Tammemagi will be attending the Era of Hope meeting in September 2002.

**KEY RESEARCH ACCOMPLISHMENTS: NA.**

**REPORTABLE OUTCOMES: NA.**

**CONCLUSIONS**

It is too early into the study to draw any substantive or methodologic conclusions.

## **APPENDIX 1. Sample of Computer Database Entry Forms (Microsoft Access)**

StudyID **03672916**

ADDITIONAL INFORMATION/SUMMARY

If the chart information was incomplete or insufficient, choose 'Yes' and specify below ☐ 0 = Nul 1 = Yes

Comments

What is the date on the first record for this patient (not limited to the abstraction period)

In the 5 years prior to diagnosis, for how many years were records abstracted

In the 5 years prior to diagnosis, for how many months were records abstracted

If the records in the last 5 years had a gap > 2 years, was it because the patient:

Was healthy and did not need to see a doctor? ☐ 0 = Nul 1 = Yes

Was being seen elsewhere? ☐ 0 = Nul 1 = Yes

Don't know the reason? ☐ 0 = Nul 1 = Yes

What is the date on the last record for this patient (not limited to the abstraction period)

In the 3 years post diagnosis, for how many years were records abstracted

In the 3 years post diagnosis, for how many months were records abstracted

Record any additional comments about this case:

THIS CHART IS A "RE-DO" OF THE ORIGINAL, DONE IN 10/01. SOME DATE DISCREPANCIES WERE NOTED ON THE ORIGINAL - CHART WAS REORDERED AND RE-REVIEWED.

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StudyID **03672916**



StudyID 0359346

ALCOHOL USE (documented 5 years before to 3 years after diagnosis)

Regarding ALCOHOL consumption the records indicate the following:

- 0 = Abstained from alcohol / No consumption (<1/mth)
- 1 = Mild use (past or present) (1-13 drinks/month)
- 2 = Moderate use (past or present) (4-14 drinks/wk)
- 3 = Past heavy use (>14 drinks/wk)
- 4 = Current heavy use (>14 drinks/wk)
- 5 = Heavy use, not otherwise specified (>14 drinks/wk)
- 7 = Alcohol was consumed by not quantified
- 8 = record shows "0"
- 9 = No alcohol data were available

Date: 09/20/1982 Code #: 7	Date: <input type="text"/> Code #: <input type="text"/>	Date: <input type="text"/> Code #: <input type="text"/>	Date: <input type="text"/> Code #: <input type="text"/>
Date: <input type="text"/> Code #: <input type="text"/>	Date: <input type="text"/> Code #: <input type="text"/>	Date: <input type="text"/> Code #: <input type="text"/>	Date: <input type="text"/> Code #: <input type="text"/>

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StudyID 0359403P

ALCOHOL USE (documented 5 years before to 3 years after diagnosis)



Study ID **03673616**

**(4) DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS (ICD 280-289)**

- |  |                          |                 |
|--|--------------------------|-----------------|
| CM59-Deficiency and other or unspecified anemi               | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM60-Acute post-hemorrhagic anemi                            | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM61-Sickle cell anemia                                      | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM62-Coagulation and hemorrhagic disorder                    | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM63-Diseases of white blood cell                            | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM64-Other hematologic conditions, including spleen disorder | <input type="checkbox"/> | 0 = No, 1 = Yes |

StudyID

0024

BODY SIZE INFORMATION (exclude data during pregnancy)

Maximum Height (inches)

Date:

Pre-diagnosis weight closest to diagnosis date (pounds)

Date:

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StudyID **03673810**

PATIENT HISTORY OF BREAST LESIONS BEFORE THE INDEX BREAST CANCER

Breast Biopsy History throughout patient records ☐ 9 ☐ 0 = No ☐ 1 = Yes ☐ 9 = Unknown

If yes, complete table below:

Dates:	Results (specify L/R)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right
<input type="text"/>	<input type="text"/>	<input type="text"/>	Specify Left or Right

1. Benign Breast Disease (BBD)
2. Ductal Carcinoma In Situ (DCIS)
3. Lobular Carcinoma In Situ (LCIS)
4. Both BBD and CIS/Cancer
5. Invasive Carcinoma (specify histopathologic type)
6. Lumpectomy or Mastectomy (unilateral or bilateral) not further specified
7. Cosmetic Breast Reduction
8. Cosmetic Breast Enlargement
9. Other Breast Biopsy (epithelial biopsy of breast skin, nipple, fat, axillary lymph nodes, etc.
99. Incomplete/Inconclusive Unknown

StudyID **12425377**

# CASE DESCRIPTION AND EPIDEMIOLOGIC DATA

## CONFIRMATION OF CASE STATUS

Is there evidence in the chart that the patient was diagnosed with breast cancer or suspicion of invasive breast cancer on the same date (or within 2 weeks of the date) as it appears as the "Diagnosis Date" for the Josephine Ford Cancer Registry

☐

0 = No, 1 = Yes

If Yes, record original JFCC diagnosis date here:

If No, do alternative breast cancer diagnosis dates exist?

☐

0 = No, 1 = Yes

Alternative diagnosis date1

Alternative diagnosis date2

Alternative diagnosis date3

If you are unable to confirm diagnosis of invasive breast cancer, STOP REVIEW and consult with investigator.

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StudyID 03673810

## (7) DISEASES OF THE CIRCULATORY SYSTEM (ICD 390-459)

CM96-Heart valve disorders	<input type="checkbox"/>	0 = No, 1 = Yes			
CM97-Peri-, endo-, and myocarditis, cardiomyopathy (except that caused by tuberculosis or ST	<input type="checkbox"/>		0 = No, 1 = Yes		
CM98-Essential hypertension	<input type="checkbox"/>	1	0 = No, 1 = Yes		
CM99-Hypertension with complications and secondary hypertension	<input type="checkbox"/>		0 = No, 1 = Yes		
CM100-Myocardial infarctio	<input type="checkbox"/>		0 = No, 1 = Yes		
CM101-Coronary atherosclerosis and other heart diseases	<input type="checkbox"/>		0 = No, 1 = Yes		
CM102-Angina (non-specific or non-angina chest pain is coded under #322	<input type="checkbox"/>		0 = No, 1 = Yes		
CM103-Pulmonary heart disease (cor pulmonal	<input type="checkbox"/>		0 = No, 1 = Yes		
CM104-Other or ill-defined heart diseases	<input type="checkbox"/>		0 = No, 1 = Yes		
CM105-Conduction disorder	<input type="checkbox"/>		0 = No, 1 = Yes		
CM106-Cardiac dysrhythmias/ arrhythmia	<input type="checkbox"/>		0 = No, 1 = Yes		
CM107-Cardiac arrest or ventricular fibrillatio	<input type="checkbox"/>		0 = No, 1 = Yes		
CM108-Congestive heart failur	<input type="checkbox"/>		0 = No, 1 = Yes		
CM109-Acute cerebrovascular disease	<input type="checkbox"/>		0 = No, 1 = Yes		
CM110-Occlusion or stenosis of precerebral arterie	<input type="checkbox"/>		0 = No, 1 = Yes		
CM111-Other and ill-defined cerebrovascular diseases	<input type="checkbox"/>		0 = No, 1 = Yes		
CM112-Transient cerebral ischemi	<input type="checkbox"/>		0 = No, 1 = Yes		
CM113-Late effects of cerebrovascular disease, i.e., plegia or hemiplegi	<input type="checkbox"/>		0 = No, 1 = Yes		
CM114-Peripheral and visceral atherosclerosi	<input type="checkbox"/>		0 = No, 1 = Yes		
CM115-Aortic, peripheral, visceral artery aneurysm	<input type="checkbox"/>		0 = No, 1 = Yes		
CM115B-Aortic, peripheral, visceral artery aneurysms - If yes, where was it locate	<input type="checkbox"/>				
CM115C-Aortic, peripheral, visceral artery aneurysms - What was its size? ____ c	<input type="checkbox"/>				
CM115D-Aortic, peripheral, visceral artery neourysms - Was it surgically corrected	<input type="checkbox"/>				0 = No, 1 = Yes
CM116-Aortic and peripheral arterial embolism or thrombo	<input type="checkbox"/>		0 = No, 1 = Yes		
CM117-Other circulatory disease, including hypertensio	<input type="checkbox"/>		0 = No, 1 = Yes		
CM118-Phlebitis, thrombophlebitis and thromboembolis	<input type="checkbox"/>		0 = No, 1 = Yes		
CM119-Varicose veins of lower extremit	<input type="checkbox"/>		0 = No, 1 = Yes		
CM120-Hemorrhoid	<input type="checkbox"/>		0 = No, 1 = Yes		
CM121-Other diseases of veins and lymphatic	<input type="checkbox"/>		0 = No, 1 = Yes		

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Diagnosis date month

Diagnosis date year

Study ID

Initials

Last 3-digits of MRN

# COMORBIDITIES

Please document all the comorbidity (Indicate Yes="1") that the patient had a history of in their record from 3 years prior to diagnosis to 6 months following diagnosis or until the first treatment, which ever regardless of when comorbidities actually occurred. The comorbidity did not have to have been present during this period, it just needed to be documented in the medical records during this time period. If any information is given as to when the comorbidity or sign/symptom was diagnosed or occurred and its duration, please write it down beside its listing on the abstraction form.

For diagnosis/occurrence, please specify the year or date.

For duration please specify the number of years/months.

The systems are listed in the following order:

(1) Infectious and Parasitic Diseases	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(2) Previous Neoplasms	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(3) Endocrine, Nutritional/Metabolic Diseases, Immunity Disorders	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(4) Diseases of the Blood and Blood-Forming Organs	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(5) Mental Disorders	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(6) Diseases of the Nervous System Sense Organs	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(7) Diseases of the Circulatory System	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(8) Diseases of the Respiratory System	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(9) Diseases of the Digestive System	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(10) Diseases of the Genitourinary System	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(11) Complications of Pregnancy, Childbirth, and the PuerPerium	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(12) Diseases of the Skin and Subcutaneous Tissue	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(13) Diseases of Musculoskeletal and Connective Tissue	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(14) Congenital Anomalies	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(15) Certain Conditions Originating in the Perinatal Period	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(16) Injury/Trauma Poisoning	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>
(17) Symptoms and Signs of the Index cancer, and ILL-DEFINED CONDITIONS	<input type="text"/> 0 = Null 1 = Yes	Diagnosis/Occurrence-Date and year <input type="text"/>	Duration-years and month <input type="text"/>

StudyID **03674816**

(14) CONGENITAL ANOMALIES (ICD 740-759)

- |  |                          |                 |
|--|--------------------------|-----------------|
| CM213-Cardiac and circulatory anomalie   | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM214-Digestive congenital anomalie      | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM215-Genitourinary congenital anomalie  | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM216-Nervous system congenital anomalie | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM217-Other congenital anomalie          | <input type="checkbox"/> | 0 = No, 1 = Yes |

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## (9) DISEASES OF THE DIGESTIVE SYSTEM (ICD 520-579)

CM135-Intestinal infectio	<input type="checkbox"/>	0 = No, 1 = Yes	
CM136-Disorders of teeth and ja	<input type="checkbox"/>	0 = No, 1 = Yes	
CM137-Diseases of mouth, excluding denta	<input type="checkbox"/>	0 = No, 1 = Yes	
CM138-Esophageal disorder	<input type="checkbox"/>	0 = No, 1 = Yes	
CM139-Gastroduodenal ulcer (except hemorrhage	<input type="checkbox"/>	0 = No, 1 = Yes	
CM140-Gastritis and duodeniti	<input type="checkbox"/>	0 = No, 1 = Yes	
CM141-Other disorders of stomach and duodenu	<input type="checkbox"/>	0 = No, 1 = Yes	
CM142-Appendicitis and other appendiceal conditions	<input type="checkbox"/>	0 = No, 1 = Yes	
CM143-Abdominal herni	<input type="checkbox"/>	0 = No, 1 = Yes	CM143-If yes, was it accompanied by obstruction or gangrene? <input type="checkbox"/> 0 = No, 1 = Yes
CM144-Regional enteritis and ulcerative colitis, including inflammatory bowel diseases, such as Crohn's disease	<input type="checkbox"/>	0 = No, 1 = Yes	ulcerative colitis <input type="checkbox"/> 0 = No, 1 = Yes
CM145-Intestinal obstruction without hernia, e.g., paralytic ileus, impaction, adhesion	<input type="checkbox"/>	0 = No, 1 = Yes	CM145-If yes, specify <input type="text"/>
CM146-Diverticulosis and diverticuliti	<input type="checkbox"/>	0 = No, 1 = Yes	
CM147-Anal and rectal conditions	<input type="checkbox"/>	0 = No, 1 = Yes	
CM148-Peritonitis and intestinal absces	<input type="checkbox"/>	0 = No, 1 = Yes	
CM149-Biliary tract disease, e.g., cholecystitis, cholelithiasis	<input type="checkbox"/>	0 = No, 1 = Yes	
CM150-Liver disease, alcohol-relate	<input type="checkbox"/>	0 = No, 1 = Yes	
CM151-Other liver diseases, e.g., liver disease or cirrhosis without mention of alcohol, liver abscess, ascit	<input type="checkbox"/>	0 = No, 1 = Yes	
CM152-Pancreatic disorders (not diabetes)	<input type="checkbox"/>	0 = No, 1 = Yes	
CM153-Gastrointestinal hemorrhag	<input type="checkbox"/>	0 = No, 1 = Yes	CM153-If yes, specify <input type="text"/>
CM154-Noninfectious gastroenteriti	<input type="checkbox"/>	0 = No, 1 = Yes	
CM155-Other gastrointestinal disorders, e.g., constipation, dysphagi	<input type="checkbox"/>	0 = No, 1 = Yes	CM155-If yes, specify <input type="text"/>



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## (1) INFECTIOUS AND PARASITIC DISEASES (ICD 001-139)

No = 0 the default, YES = 1

CM1 Tuberculosis

☐

No = 0, Yes = 1

Is this a recent infection (&lt; 3 years old) or an active infection under treatment?

☐

No = 0, Yes = 1

CM2 Septicemia (except in labor)

☐

No = 0, Yes = 1

CM3 Bacterial infection, unspecified site

☐

No = 0, Yes = 1

CM4 Mycoses

☐

No = 0, Yes = 1

CM5 HIV infection/AIDS

☐

No = 0, Yes = 1

CM6 Hepatitis (infectious, not primarily alcohol-related, see #150)

☐

No = 0, Yes = 1

Hepatitis virus: A, B, C, D, E, G, or other

☐0=A, 1=B, 2=C,  
3=D, 4=E, 5=G,  
6=Other

CM7 Viral infection (not hepatitis)

☐

No = 0, Yes = 1

CM8 Other infections, including parasitic

☐

No = 0, Yes = 1

CM9 Sexually transmitted infections = STD (not HIV or hepatitis)

☐

No = 0, Yes = 1

CM10 Immunizations and screening for infectious disease

☐

No = 0, Yes = 1

If yes, specify immunization

☐

CM248 Gangrene

☐

No = 0, Yes = 1

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Please list all medications taken by the patient for 3 years prior to the breast cancer diagnosis.  
Exclude the oral contraceptives/hormone replacement therapies listed previously.

Medication	Indication why it was given	Estimate usage 1 = Short term (< 6 months) 2 = Long term (>= 6 months) 9 = unknown
ALDACTAZIDE	HTN	2
ZYLOPRIM	9	2
NALFON	KNEE PAIN	1
CLINORIL	BURSITIS	9
NAPROSYN	JOINT PAIN	1

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StudyID **03673810**

(15) CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD (ICD 760-779)

- |  |                          |                 |
|--|--------------------------|-----------------|
| CM218-Liveborn   | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM219-Short gestation, low birth weight, and fetal growth retardatio | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM220-Intrauterine hypoxia and birth asphyxi                         | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM221-Respiratory distress syndrom                                   | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM222-Hemolytic jaundice and perinatal jaundic                       | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM223-Birth traum  | <input type="checkbox"/> | 0 = No, 1 = Yes |
| CM224-Other perinatal condition                                      | <input type="checkbox"/> | 0 = No, 1 = Yes |

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03573846

## (8) DISEASES OF THE RESPIRATORY SYSTEM (ICD 460-519)

CM122-Pneumonia (except that caused by tuberculosis or sexually transmitted diseases)

☐

0 = No, 1 = Yes

CM123-Influenza

☐

0 = No, 1 = Yes

CM124-Acute and chronic tonsillitis

☐

0 = No, 1 = Yes

CM125-Acute bronchitis

☐

0 = No, 1 = Yes

CM126-Other upper respiratory infection

☐

0 = No, 1 = Yes

CM126-If yes, specify:

CM127-Chronic obstructive pulmonary disease, bronchiectasi

☐

0 = No, 1 = Yes

CM127B-COPD otherwise not specific

☐

0 = No, 1 = Yes

CM127C-Emphysem

☐

0 = No, 1 = Yes

CM127D-Chronic bronchiti

☐

0 = No, 1 = Yes

CM127E-Bronchiectasis

☐

0 = No, 1 = Yes

CM128-Asthm

☐

0 = No, 1 = Yes

CM304-Pulmonary fibrosis/intestinal lung disease

☐

0 = No, 1 = Yes

CM129-Aspiration pneumonitis, food/vomitu

☐

0 = No, 1 = Yes

CM130-Pleurisy, pneumothorax, pulmonary collapse (atelectasi)

☐

0 = No, 1 = Yes

CM131-Respiratory failure, insufficiency, arrest (adul

☐

0 = No, 1 = Yes

CM132-Lung Disease due to external agents, including pneumoconioses, e.g., anthracosis, silicosis, asbestosis, berylliosis, siderosis, stannosis, barito

☐

0 = No, 1 = Yes

CM133-Other lower respiratory diseases

☐

0 = No, 1 = Yes

CM134-Other upper respiratory diseases

☐

0 = No, 1 = Yes

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03678810

(12) DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE (ICD 680-709)

CM197-Skin and subcutaneous tissue infections, e.g., cellulitis or abscess	<input type="checkbox"/>	0 = No, 1 = Yes
CM198-Other inflammatory condition of skin	<input type="checkbox"/>	0 = No, 1 = Yes
CM199-Chronic ulcer of skin	<input type="checkbox"/>	0 = No, 1 = Yes
CM200-Other skin disorder	<input type="checkbox"/>	0 = No, 1 = Yes

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## **APPENDIX 2.**

### **Comorbidity Explains Some of the Race Difference in Lung Cancer Survival**

C. M. Tammemagi, C. Neslund-Dudas, M. Simoff, P. Kvale  
Josephine Ford Cancer Center, Detroit, MI 48202

#### **BACKGROUND**

Lung cancer, the commonest cause of cancer death in North America, generally has a grave prognosis, which is worse in Blacks compared to Whites. The purpose of this study was to determine whether comorbidity explains some of the race difference in survival.

#### **METHODS**

A historical cohort study was carried out of 1155 lung cancer patients diagnosed at the Henry Ford Health System (HFHS) between 1995 and 1998. Sociodemographic, exposure, clinicopathologic, treatment and survival data were collected by abstraction of medical records and from the HFHS Tumor Registry. Fifty-six comorbidities were studied.

#### **RESULTS**

19 comorbidities were associated with survival: HIV/AIDS, tuberculosis, previous metastatic cancer, thyroid/glandular diseases, electrolyte imbalance, anemia, other blood diseases, dementia, neurologic disease, congestive heart failure, chronic obstructive pulmonary disease, asthma, pulmonary fibrosis, liver disease, gastrointestinal bleeding, renal disease, connective tissue disease, osteoporosis and peripheral vascular disease. Only the latter was protective. The occurrence of at least one of the 18 deleterious comorbidities occurred in 64.0% of women and 59.9% of men ( $p = 0.16$ ), and 65.4% of Blacks and 59.0% of Whites ( $p = 0.03$ ). The unadjusted hazard ratio for race (Black vs. White) was 1.203 (95% CI 1.05-1.38,  $p = 0.008$ ) and adjusted for all 19 predictive comorbidities was 1.156 (95% CI 1.00-1.33,  $p = 0.05$ ), a decline of 23.1%.

#### **CONCLUSION**

The higher prevalence of deleterious comorbidities in Blacks explains some of their overall poorer lung cancer survival.

### **APPENDIX 3. Revised Abstraction Form**

Study ID #: \_\_\_\_\_

Abstraction Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Abstraction Time: \_\_\_\_\_

Abtractor ID: \_\_\_\_\_ (use month/day/ year throughout)

**CASE DESCRIPTION & EPIDEMIOLOGIC DATA****CONFIRMATION OF CASE STATUS**

Is there evidence in the chart that the patient was diagnosed with breast cancer or suspicion of invasive breast cancer on the same date (or within 2 weeks of the date) as it appears as the "Diagnosis Date" for the Josephine Ford Cancer Registry?

If Yes → Continue.

Record original JFCC dx date here: \_\_\_\_/\_\_\_\_/\_\_\_\_

If No → Do alternative breast cancer diagnosis dates exist?

Please enter the dates here:

1. \_\_\_\_/\_\_\_\_/\_\_\_\_

2. \_\_\_\_/\_\_\_\_/\_\_\_\_

3. \_\_\_\_/\_\_\_\_/\_\_\_\_

If you are unable to confirm diagnosis of invasive breast cancer, **STOP REVIEW** and consult with investigator.

**SOCIODEMOGRAPHIC DATA** (Complete only if it differs from that provided, i.e., JFCC Tumor Registry data)

Name Last: \_\_\_\_\_

First: \_\_\_\_\_ Middle Initial: \_\_\_\_\_

Address at diagnosis: Street Address \_\_\_\_\_

City State ZIP Code \_\_\_\_\_

Current address, if different from diagnosis address

Street Address \_\_\_\_\_

City State ZIP Code \_\_\_\_\_

Date of Birth: \_\_\_\_\_

**Race**

1 = White

2 = Black / African American

3 = American Indian or Alaskan Native

4 = Asian

5 = Pacific Islander or Native Hawaiian

6 = Other, specify \_\_\_\_\_

9 = Unknown

**Ethnicity** 0 = Non-Hispanic 1 = Hispanic**Marital Status at diagnosis**

1 = Married or living as married

2 = Not married

2a = Single (never married)

2b = Divorced or legally separated

2c = Widowed

9 = Unknown



**BODY SIZE INFORMATION (exclude data during pregnancy)**

Maximum Height (inches): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Pre-diagnosis weight closest to **diagnosis date** (pounds): \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_**REPRODUCTIVE / ENDOCRINE HISTORY (Mark NA if data are not available)**

Age at menarche (years) \_\_\_\_\_

Menopausal status at diagnosis.

01= Pre-menopausal

02= Peri-menopausal (Transition between pre- &amp; post-menopause. Menstrual cycles irregular, hot flashes.)

03= Post-menopausal When did menopause occur? \_\_\_\_\_ Year/age/years ago?

04= Hysterectomy. Number of ovaries removed? \_\_\_\_\_ Date of surgery: \_\_\_\_/\_\_\_\_/\_\_\_\_

99=Undetermined

Parity (# of live births) as of the diagnosis date. \_\_\_\_

If pre-menopausal, record the number of post-diagnosis live births \_\_\_\_

**Did the patient use hormone contraceptives?** 0=No 1=Yes 9=Unknown

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

Type: 1=Birth Control Pills

Length of time (years): \_\_\_\_\_

2=Shots or Injections

Product Name: \_\_\_\_\_

3=Subdermal Implants

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

Type: 1=Birth Control Pills

Length of time (years): \_\_\_\_\_

2=Shots or Injections

Product Name: \_\_\_\_\_

3=Subdermal Implants

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

Type: 1=Birth Control Pills

Length of time (years): \_\_\_\_\_

2=Shots or Injections

Product Name: \_\_\_\_\_

3=Subdermal Implants

**Did the patient use hormone replacement therapy?** 0=No 1=Yes 9=Unknown

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

1=Estrogen Alone

Length of time (years): \_\_\_\_\_

2=Estrogen plus Progesterone

Product Name: \_\_\_\_\_

3=Progesterone Alone

4=Other

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

1=Estrogen Alone

Length of time (years): \_\_\_\_\_

2=Estrogen plus Progesterone

Product Name: \_\_\_\_\_

3=Progesterone Alone

4=Other

Start date of use: \_\_\_\_/\_\_\_\_/\_\_\_\_

1=Estrogen Alone

Length of time (years): \_\_\_\_\_

2=Estrogen plus Progesterone

Product Name: \_\_\_\_\_

3=Progesterone Alone

4=Other

**FAMILY HISTORY OF BREAST CANCER**

Is there a family history of breast cancer? 1= Yes, there is a noted family history  
 (BRCA) 2= No, there is a noted negative family history of BRCA  
 8 = record shows "Ø"  
 9=Undetermined, not documented

**MAMMOGRAPHY HISTORY**

Mammography History from 3 years prior to first treatment: 0=No 1=Yes 9=Unknown

If yes, complete the following table

Dates:		Results:		Results Key
		Left	Right	
1.	___/___/___	_____	_____	1= Negative
2.	___/___/___	_____	_____	2= Benign/Negative
3.	___/___/___	_____	_____	3= Probably Benign
4.	___/___/___	_____	_____	4= Suspicious
5.	___/___/___	_____	_____	5= Highly Suspicious
6.	___/___/___	_____	_____	8= Incomplete/Inconclusive
7.	___/___/___	_____	_____	9= Unknown
8.	___/___/___	_____	_____	
9.	___/___/___	_____	_____	
10.	___/___/___	_____	_____	
11.	___/___/___	_____	_____	
12.	___/___/___	_____	_____	
13.	___/___/___	_____	_____	
14.	___/___/___	_____	_____	
15.	___/___/___	_____	_____	

**PATIENT HISTORY OF BREAST LESIONS BEFORE THE INDEX BREAST CANCER****Breast Biopsy History throughout patient records**

0=No 9=Unknown

1=Yes If yes, complete table below

Dates	Results (specify L/R)
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____
___/___/___	_____

Key to Results:

1. Benign Breast Disease (BBD)
2. Ductal Carcinoma In Situ (DCIS)
3. Lobular Carcinoma In Situ (LCIS)
4. Both BBD and CIS/Cancer
5. Invasive Carcinoma (specify histopathologic type)
6. Lumpectomy or Mastectomy (unilateral or bilateral)  
not further specified
7. Cosmetic Breast Reduction
8. Cosmetic Breast Enlargement
9. Other Breast Biopsy (epithelial biopsy of breast  
skin, nipple, fat, axillary lymph nodes, etc.)
99. Incomplete/Inconclusive Unknown

**SYMPTOMS AND LEAD-UP TO THE DIAGNOSIS OF BREAST CANCER**

When was the first time that a suspicion of breast cancer for this index case of breast cancer was documented in medical records or indicated by a medical procedure? \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Did patient report breast symptoms? ☐ 01=Yes → If yes, please continue with the next question.

☐ 02=No. Explicit mention of no symptoms → If no, skip to next box.

☐ 99=No comment about symptoms → Skip to next box.

Patient Reported Breast Symptoms (Indicate <u>all</u> that apply.)	L	R	Unk		Date Documented	Duration (mths)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01=Lump or mass	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02=Pain Specify: _____	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03=Nipple discharge	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04=Visual change	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	05=Odor	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88=Other, specify: _____	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99=Unspecified	_____	_____

**PATHOLOGY SUMMARIES of the specimens related to the index breast cancer.**

If cytology, biopsy and surgical excision were involved, please complete for each procedure.

<b>CYTOLOGY</b> (Indicate <u>all</u> that apply for <u>each</u> breast.)	L	R	Unk	Results
Date of procedure: ____ / ____ / ____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00=Insufficient sample
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01=Normal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02=Atypical cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03=Abnormal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04=Malignant cells, specify type _____
Photocopy report masking patient identifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88=Other, specify: _____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99=Undetermined
(Indicate <u>all</u> that apply for <u>each</u> breast.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00=Insufficient sample
Date of procedure: ____ / ____ / ____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01=Normal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02=Atypical cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03=Abnormal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04=Malignant cells, specify type _____
Photocopy report masking patient identifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88=Other, specify: _____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99=Undetermined
(Indicate <u>all</u> that apply for <u>each</u> breast.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	00=Insufficient sample
Date of procedure: ____ / ____ / ____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01=Normal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02=Atypical cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03=Abnormal cells
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04=Malignant cells, specify type _____
Photocopy report masking patient identifiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88=Other, specify: _____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99=Undetermined

Continued, PATHOLOGY SUMMARY of the specimens related to the index breast cancer.

- If cytology, biopsy & surgical excision were involved complete for each procedure.

HISTOPATHOLOGY FROM BIOPSY		L	R	Unk	Results
(Indicate <u>all</u> that apply for <u>each</u> breast.)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01= Atypical hyperplasia
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02= Ductal hyperplasia
Date of procedure: ____ / ____ / ____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03= Fibroadenoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04= Intraductal carcinoma in situ (DCIS)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	05= Lobular carcinoma in situ (CIS)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	06= CIS not otherwise specified
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	07= Invasive ductal carcinoma (DC)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	08= Invasive DC with DCIS
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	09= Invasive lobular carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10= Mucinous carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11= Medullary carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12= Papillary carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13= Tubular carcinoma
Photocopy report masking patient identifiers		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14= Adenoid cystic carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15= Secretory (juvenile) carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16= Apocrine carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17= Paget's disease of the nipple
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18= Invasive cancer, NOS
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19= Cystosarcoma phyllodes
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88= Other, <i>specify</i> : _____
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99= Undetermined

  

HISTOPATHOLOGY -- SURGICAL EXCISION		L	R	Unk	Results
(Indicate <u>all</u> that apply for <u>each</u> breast.)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01= Atypical hyperplasia
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02= Ductal hyperplasia
Date of procedure: ____ / ____ / ____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	03= Fibroadenoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	04= Intraductal carcinoma in situ (DCIS)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	05= Lobular carcinoma in situ (CIS)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	06= CIS not otherwise specified
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	07= Invasive ductal carcinoma (DC)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	08= Invasive DC with DCIS
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	09= Invasive lobular carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10= Mucinous carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11= Medullary carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12= Papillary carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13= Tubular carcinoma
Photocopy report masking patient identifiers		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14= Adenoid cystic carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15= Secretory (juvenile) carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16= Apocrine carcinoma
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17= Paget's disease of the nipple
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18= Invasive cancer, NOS
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19= Cystosarcoma phyllodes
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	88= Other, <i>specify</i> : _____
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	99= Undetermined

STAGING (Please flag any conflicting pathology, staging, treatment or follow-up data, &amp; discuss with investigators)

PLEASE PHOTOCOPY PATHOLOGISTS REPORTS minus patient identifiers	
Primary Tumor (T)	<input type="checkbox"/> TX Primary tumor cannot be assessed <input type="checkbox"/> TO No evidence of primary tumor <input type="checkbox"/> Tis Carcinoma in situ <input type="checkbox"/> T1 Tumor $\leq 2$ cm in greatest dimension <input type="checkbox"/> pT1mic Microinvasion 0.1 cm or less in greatest dimension <input type="checkbox"/> T1a Tumor $>0.1$ to $\leq 0.5$ cm in greatest dimension <input type="checkbox"/> T1b $>0.5$ to $\leq 1$ cm in greatest dimension <input type="checkbox"/> T1c $>1$ cm to $\leq 2$ cm in greatest dimension <input type="checkbox"/> T2 Tumor $>2$ cm to 5 cm <input type="checkbox"/> T3 Tumor $>5$ cm <input type="checkbox"/> T4 Tumor of any size with direct extension to chest wall or skin <input type="checkbox"/> T4a Extension to chest wall <input type="checkbox"/> T4b Edema or ulceration of the skin or satellite skin nodules confined to same breast <input type="checkbox"/> T4c Both T4a and T4b <input type="checkbox"/> T4d Inflammatory carcinoma Paget's disease associated with a tumor is classified by size of the tumor <input type="checkbox"/> Multifocal
Regional Lymph Nodes (N)	<input type="checkbox"/> NX Regional LN cannot be assessed (e.g., previously removed or were not sampled) <input type="checkbox"/> N0 No regional LN metastasis <input type="checkbox"/> N1 Spread to movable ipsilateral axillary LN(s) <input type="checkbox"/> N2 Spread to ipsilateral axillary LN(s) fixed to one another or to other structures <input type="checkbox"/> N3 Spread to ipsilateral internal mammary LN(s)
Pathologic Classification (pN)  # LN positive _____  # LN tested _____	<input type="checkbox"/> pNX Regional LNs cannot be assessed <input type="checkbox"/> pNO No regional LN metastasis <input type="checkbox"/> pN1 Metastasis to movable ipsilateral axillary LN(s) <input type="checkbox"/> pN1a Only micrometastasis (none larger than 0.2 cm) <input type="checkbox"/> pN1bi Metastasis in 1 to 3 LNs, $>0.2$ to $<2$ cm in greatest dimension <input type="checkbox"/> pN1bii Metastasis to 4 or more LNs, $>0.2$ to $<2$ cm in greatest dimension <input type="checkbox"/> pN1biiii Extension of tumor beyond capsule of a LN $<2$ cm in greatest dimension <input type="checkbox"/> pN1biv Metastasis to LN $\geq 2$ cm in dimension <input type="checkbox"/> pN2 Metastasis to ipsilateral axillary LNs that are fixed to other LN(s) or structures <input type="checkbox"/> pN3 Metastasis to ipsilateral internal mammary LN(s)
Distant Metastasis	<input type="checkbox"/> MX <input type="checkbox"/> M0 <input type="checkbox"/> M1 (includes metastasis to ipsilateral supraclavicular LN(s))  If M=1, what are the number of metastatic organ sites? _____  Specify sites (which organs) _____
What was the TNM stage group, if provided?	<input type="checkbox"/> 0 (TIS) <input type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> IIA <input type="checkbox"/> IIB <input type="checkbox"/> III <input type="checkbox"/> IIIA <input type="checkbox"/> IIIB <input type="checkbox"/> IV <input type="checkbox"/> Stage X (cannot be determined) <input type="checkbox"/> Not provided
Histopathologic	<input type="checkbox"/> GX= cannot be assessed <input type="checkbox"/> G1= well differentiated <input type="checkbox"/> G2= moderately differentiated, <input type="checkbox"/> G3= poorly differentiated <input type="checkbox"/> G4= Undifferentiated <input type="checkbox"/> G9 = Unknown

**TREATMENT**

<b>Did the patient receive treatment?</b>	1 = treatment carried out (mostly at HFHS) 2 = treatment primarily carried out elsewhere 3 = treatment interrupted / incomplete 4 = treatment advised but refused 5 = no treatment advised 6 = no treatment given, reasons unknown 9 = unknown whether treatment received
<b>Was the breast cancer treated with SURGERY?</b> 0 = no 1 = yes 9 = unknown	If yes, what was the date? (1 <sup>st</sup> if more than one) ____/____/____ Surgery consisted of 1 = breast conserving surgery (lumpectomy, wide excision, partial mastectomy, segmental mastectomy or quadrantectomy) 2 = total mastectomy without axillary lymph node dissection 3 = modified radical mastectomy (simple mastectomy + lymph node dissection) 4 = radical mastectomy (includes pectoral muscle dissection) 5 = lumpectomy +/- node removal
<b>Was the breast cancer treated with RADIATION?</b>	0 = no 1 = yes 9 = unknown If yes, what was the start date? ____/____/____
<b>Was the breast cancer treated with CHEMOTHERAPY?</b> (other than tamoxifen) 0 = no 1 = yes 9 = unknown	If yes, what was the start date? ____/____/____ What were the agents? _____ _____ _____ _____ _____
Was tamoxifen given? 0 = no 1 = yes 9 = unknown      When was it started? ____/____/____ For what duration was it administered? _____	
<b>Was the breast cancer treated with HORMONE OR ENDOCRINE THERAPY <u>other than tamoxifen</u>?</b> 0 = no 1 = yes    If yes, what was the start date? ____/____/____ <b>If yes, which of the following apply? (If no mention is made assume the default of "0")</b> Ovarian ablation by surgery    No = 0    Yes = 1 Ovarian ablation by radiation    No = 0    Yes = 1 Luteinizing-releasing hormone antagonist    No = 0    Yes = 1 Progestins (eg. megestrol acetate or medroxyprogesterone acetate)    No = 0    Yes = 1 Estrogens    No = 0    Yes = 1 Androgens    No = 0    Yes = 1 Adrenalectomy    No = 0    Yes = 1 Hypophysectomy    No = 0    Yes = 1	

**RESPONSE and FOLLOW-UP**

Did cancer recur or spread (local or distant progression)? 0=no 1=yes 9=unknown If yes, When was it 1 <sup>st</sup> noted? ____ / ____ / ____ To where? _____ What was the diagnosis of recurrence/progression based on 1=pathology 2=clinical 3=both 9=not stated?	
Did the patient develop one or more subsequent primary (new) breast cancers? 0=no 1=yes 9= unknown If yes, Histopathologic dx? _____ Date? ____ / ____ / ____ 0=no 1=yes 9= unknown If yes, Histopathologic dx? _____ Date? ____ / ____ / ____	
Did the patient develop other types of primary cancer? 0=no 1=yes 9= unknown If yes, type of cancer? _____ Date? ____ / ____ / ____ 0=no 1=yes 9= unknown If yes, type of cancer? _____ Date? ____ / ____ / ____	
Did the patient develop another type of cancer, but unknown if it is 2 <sup>nd</sup> primary or metastasis? 0=no 1=yes 9= unknown If yes, type of cancer? _____ Date? ____ / ____ / ____ 0=no 1=yes 9= unknown If yes, type of cancer? _____ Date? ____ / ____ / ____	
Do the records indicate that the patients died? 0=no 1=yes If yes, what was the death date? ____ / ____ / ____ If patient died, were causes of death described? If yes, what were the causes of death? 0 = no 1 = yes <div style="border: 1px solid black; height: 40px; width: 100%; margin-top: 5px;"></div>	
If the patient was alive at last contact, what was the date of the last contact? ____ / ____ / ____	

**ALCOHOL USE (documented 5 years before to 3 years after diagnosis)**

Regarding ALCOHOL consumption the records indicate the following:				
0 = Abstained from alcohol / No consumption (<1/mth) 1 = Mild use (past or present) (1-13 drinks/month) 2 = Moderate use (past or present) (4-14 drinks/wk) 3 = Past heavy use (>14 drinks/wk) 4 = Current heavy use (>14 drinks/wk) 5 = Heavy use, not otherwise specified (>14 drinks/wk) 7 = Alcohol was consumed by not quantified 8 = record shows "Ø" 9 = No alcohol data were available	Date	Date	Date	Date
	Code #	Code #	Code #	Code #

Drinks/time is a guideline. Drink ~ 1 bottle beer ~ 1 glass wine ~ 1 shot of liquor

**MARIJUANA/CANNIBIS USE (documented 5 years before to 3 years after diagnosis)**

Regarding MARIJUANA/CANNIBIS use the records indicate the following:				
0 = Non-user 1 = Past regular use 2 = Current regular use 3 = Both past and current use 8 = record shows "Ø" 9 = No data were available	Date	Date	Date	Date
	Code #	Code #	Code #	Code #

**ILLCIT DRUG USE (documented 5 years before to 3 years after diagnosis)**

**(e.g., cocaine, crack, heroin, or non-specified intravenous drugs, etc. )**

Regarding ILLICIT DRUG use the records indicate the following:				
0 = Non-user 1 = Past regular use 2 = Current regular use 3 = Both past and current use 8 = record shows "Ø" 9 = No data were available	Date	Date	Date	Date
	Type of drug	Type of drug	Type of drug	Type of drug
	Code #	Code #	Code #	Code #

## SMOKING HISTORY

If yes, complete for each recording of smoking history that occurs on a different day or in a different record, even if the data appear redundant.

If smoking data were not available for the specified time period, then use available smoking data from any time period.

[illegible]



[illegible]

If the chart information was incomplete or insufficient, check box and specify below. ☐ 01=Yes  
Comments:

In the 3 years post diagnosis, for how many years/months were records abstracted yrs\_\_mths

10

## **COMORBIDITIES**

Please document all of the comorbidities (**Circle and indicate Yes “= 1”**) that the patient had a history of in their records from 3 years prior to diagnosis to 6 months following diagnosis or until the first treatment, which ever comes first, regardless of when the comorbidities actually occurred. The comorbidity did not have to have been present during this period, it just needed to be documented in the medical records during this time period. If any information is given as to **when the comorbidity or sign/symptom was diagnosed or occurred** and its duration, please write it down beside its listing on the abstraction form.

For **diagnosis/occurrence**, please specify the year or date.

For **duration**, please specify the number of years/months.

**The systems are listed in the following order:**

- (1) INFECTIOUS AND PARASITIC DISEASES**
- (2) PREVIOUS NEOPLASMS**
- (3) ENDOCRINE, NUTRITIONAL/METABOLIC DISEASES, & IMMUNITY DISORDERS**
- (4) DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS**
- (5) MENTAL DISORDERS**
- (6) DISEASES OF THE NERVOUS SYSTEM & SENSE ORGANS**
- (7) DISEASES OF THE CIRCULATORY SYSTEM**
- (8) DISEASES OF THE RESPIRATORY SYSTEM**
- (9) DISEASES OF THE DIGESTIVE SYSTEM**
- (10) DISEASES OF THE GENITOURINARY SYSTEM**
- (11) COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM**
- (12) DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE**
- (13) DISEASES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE**
- (14) CONGENITAL ANOMALIES**
- (15) CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD**
- (16) INJURY / TRAUMA & POISONING**
- (17) SYMPTOMS & SIGNS of the index cancer, & ILL-DEFINED CONDITIONS**

**(1) INFECTIOUS AND PARASITIC DISEASES (ICD 001-139) No = 0 the default, YES = 1**

- CM1 Tuberculosis Is this a recent infection (< 3 years old) or an active infection under treatment? Yes / No
- CM2 Septicemia (except in labor)
- CM3 Bacterial infection, unspecified site
- CM4 Mycoses
- CM5 HIV infection / AIDS
- CM6 Hepatitis (infectious, not primarily alcohol-related, see #150) Circle: Hepatitis virus A, B, C, D, E, G, or other.
- CM7 Viral infection (not hepatitis)
- CM8 Other infections, including parasitic
- CM9 Sexually transmitted infections = STD (not HIV or hepatitis)
- CM10 (Immunizations and screening for infectious disease, If yes, specify \_\_\_\_\_)
- CM248 Gangrene

**(2) PREVIOUS NEOPLASMS (ICD 140-239)**

Cancer (CA) of	A. Present No=0, Yes=1	B. Metastasis No=0, Yes=1	C. Stage	D. Histology	E. Yr of diagnosis
CM11 Head & neck					
CM12 Esophagus					
CM13 Stomach					
CM14 Colon					
CM15 Rectum & anus					
CM16 Liver & intrahepatic bile duct					
CM17 Pancreas					
CM18 Other gastrointestinal organs, peritoneum					
CM19 Bronchus, lung					
CM20 Other respiratory & intra-thoracic					
CM21 Bone & connective tissue					
CM22 Melanomas of skin					
CM23 Other non-epithelial cancer of skin					
CM24 Breast					
CM25 Uterus					
CM26 Cervix					
CM27 Ovary					
CM28 Other female genital organs					
CM29 Prostate					
CM30 Testis					
CM31 Other male genital organs					
CM32 Bladder					
CM33 Kidney and renal pelvis					
CM34 Other urinary organs					
CM35 Brain and nervous system					
CM36 Thyroid					
CM37 Hodgkin's disease					
CM38 Non-Hodgkin's lymphoma					
CM39 Leukemias					
CM40 Multiple myeloma					
CM41 Other and unspecified primary					
CM42 Secondary malignancies					
CM43 Malignant neoplasm, unspecified site					
CM44 CA, unspecified/uncertain nature or behavior					
CM45 Maintenance chemotherapy, radiotherapy		N/A	N/A	N/A	N/A
CM46 Benign neoplasm of uterus, i.e., fibroids (leiomyoma; myoma; fibromyoma)		N/A	N/A		
CM47 Other and unspecified benign neoplasm		N/A	N/A		

**(3) ENDOCRINE, NUTRITIONAL/METABOLIC DISEASES, & IMMUNITY DISORDERS (ICD 240-279)**

- CM48 Thyroid disorders e.g., goiter, hyperthyroidism, hypothyroidism, thyroiditis. If yes, specify \_\_\_\_\_
- CM49 Diabetes mellitus without complication. If yes, is it insulin-dependent? Yes / No
- CM50 Diabetes mellitus with complications. If yes, specify, e.g., ketoacidosis or uncontrolled diabetes, renal, ophthalmic, neurologic, circulatory, or other/unspecified complications. \_\_\_\_\_  
If yes, is it insulin-dependent? Yes / No
- CM51 Other endocrine disorders, e.g., parathyroid, pituitary and its hypothalamic control, adrenal or polyglandular disorders, premature ovarian failure (menopause <40years). If yes, specify \_\_\_\_\_
- CM301 Obesity / hyperalimentation documented by physician/clinician/nurse in medical records
- CM52 Nutritional deficiencies (specific). If yes, specify \_\_\_\_\_
- CM52B Under-nutrition/malnutrition (general/unspecified)
- CM53 Disorders of lipid metabolism, e.g., hypercholesterolemia, hyperlipidemia. If yes, specify \_\_\_\_\_
- CM54 Gout and other crystal arthropathies, If yes, which of the following apply?  
     CM54B Gout, mild or not further specified  
     CM54C Gout with nephropathy  
     CM54D Gout with other specific manifestations  
     CM54E Other crystal arthropathy

CM55 Fluid and electrolyte metabolic disorders, If yes, please specify on table below (Circle and indicate Yes = 1)

Water balance	CM55B Dehydration	CM55C Over-hydration
Extracellular fluid volume	CM55D Contraction	CM55E Expansion / Overload
Sodium (Na)	CM55F Hyponatremia	CM55G Hypernatremia
Potassium (K)	CM55H Hypokalemia (hypopotassemia)	CM55I Hyperkalemia (hyperpotassemia)
Calcium (Ca)	CM55J Hypocalcemia	CM55K Hypercalcemia
Phosphate (P)	CM55L Hypophosphatemia	CM55M Hyperphosphatemia
Magnesium (Mg)	CM55N Hypomagnesemia	CM55O Hypermagnesemia
Acid-Base Metabolism	CM55P Metabolic Acidosis CM55R Respiratory Acidosis	CM55Q Metabolic Alkalosis CM55S Respiratory Alkalosis
Others, specify	CM55T	

- CM302 Disorder of mineral metabolism, including iron, iodine, fluorine, zinc, chromium, selenium, manganese, molybdenum, & copper. If yes, specify \_\_\_\_\_
- CM56 Cystic fibrosis
- CM57 Immunity disorders, If yes, specify \_\_\_\_\_
- CM253 Allergic reactions
- CM303 Amyloidosis
- CM58 Other nutritional, endocrine, and metabolic disorders, If yes, specify \_\_\_\_\_

**(4) DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS (ICD 280-289)**

- CM59 Deficiency and other or unspecified anemia
- CM60 Acute post-hemorrhagic anemia
- CM61 Sickle cell anemia
- CM62 Coagulation and hemorrhagic disorders
- CM63 Diseases of white blood cells
- CM64 Other hematologic conditions, including spleen disorders

**(5) MENTAL DISORDERS (ICD 290-319)**

- CM65 Mental retardation
- CM66 Alcohol-related mental disorders, including acute intoxication, dependency or abuse.
- CM67 Substance-related mental disorders, including barbiturate, amphetamine, hallucinogen, opioid, cocaine or other or mixed drug dependence or abuse. Specify which drugs were used \_\_\_\_\_
- CM68 Senility and organic mental disorders, including senile and arteriosclerotic dementia, Alzheimer's disease.
- CM69 Affective disorders, including depressive disorder, bipolar affective disorder, manic-depressive psychosis.
- CM70 Schizophrenia and related disorders
- CM71 Other psychoses
- CM72 Anxiety, somatoform, dissociative, and personality disorders
- CM73 Preadult disorders
- CM74 Other mental conditions
- CM75 Personal history of mental disorder, mental & behavioral problems, observation/screening for mental condition

**(6) DISEASES OF THE NERVOUS SYSTEM & SENSE ORGANS (ICD 320-389)****CENTRAL NERVOUS SYSTEM**

- CM76 Meningitis (except that caused by tuberculosis or sexually transmitted disease)  
 CM77 Encephalitis (except that caused by tuberculosis or sexually transmitted disease)  
 CM78 Other CNS infection and poliomyelitis If yes, specify \_\_\_\_\_  
 CM79 Parkinson's disease  
 CM80 Multiple sclerosis  
 CM81 Other hereditary & degenerative nervous system conditions, e.g., ALS. If yes, specify \_\_\_\_\_  
 CM82 Paralysis (except that secondary to cerebrovascular diseases which goes under # 113)  
 CM83 Epilepsy, convulsions  
 CM84 Headache, including migraine  
 CM85 Coma, stupor, and brain damage

**EYE**

- CM86 Cataract  
 CM87 Retinal detachments, defects, vascular occlusion, and retinopathy  
 CM88 Glaucoma  
 CM89 Blindness and vision defects  
 CM90 Inflammation, infection of eye (except that caused by tuberculosis or sexually transmitted disease)  
 CM337 Near-sightedness (myopia), far-sightedness (hyperopia), astigmatism or needing reading glasses (presbyopia)  
 CM91 Other eye disorders If yes, specify \_\_\_\_\_

**AUDITORY SYSTEM & OTHERS**

- CM92 Otitis media and related conditions  
 CM93 Conditions associated with dizziness or vertigo  
 CM94 Other ear and sense organ disorders If yes, specify \_\_\_\_\_  
 CM95 Other nervous system disorders If yes, specify \_\_\_\_\_

**(7) DISEASES OF THE CIRCULATORY SYSTEM (ICD 390-459)**

- CM96 Heart valve disorders  
 CM97 Peri-, endo-, and myocarditis, cardiomyopathy (except that caused by tuberculosis or STD)  
 CM98 Essential hypertension  
 CM99 Hypertension with complications and secondary hypertension If yes, specify \_\_\_\_\_  
 CM100 Myocardial infarction How long ago was most recent MI? \_\_\_\_ years \_\_\_\_ months prior to cancer diagnosis.  
 CM101 Coronary atherosclerosis and other heart disease  
 CM102 Angina (non-specific or non-angina chest pain is coded under #322)  
 CM103 Pulmonary heart disease (cor pulmonale)  
 CM104 Other or ill-defined heart disease  
 CM105 Conduction disorders  
 CM106 Cardiac dysrhythmias / arrhythmias  
 CM107 Cardiac arrest or ventricular fibrillation  
 CM108 Congestive heart failure  
 CM109 Acute cerebrovascular disease  
 CM110 Occlusion or stenosis of precerebral arteries  
 CM111 Other and ill-defined cerebrovascular disease  
 CM112 Transient cerebral ischemia  
 CM113 Late effects of cerebrovascular disease, i.e., plegia or hemiplegia  
 CM114 Peripheral and visceral atherosclerosis  
 CM115 Aortic, peripheral, & visceral artery aneurysms,  
     CM115B If yes, where was it located? \_\_\_\_\_  
     CM115C What was its size? \_\_\_\_\_ cm.  
     CM115D Was it surgically corrected? No = 0, Yes = 1.  
 CM116 Aortic and peripheral arterial embolism or thrombosis  
 CM117 Other circulatory disease, including hypotension  
 CM118 Phlebitis, thrombophlebitis and thromboembolism  
 CM119 Varicose veins of lower extremity  
 CM120 Hemorrhoids  
 CM121 Other diseases of veins and lymphatics

**(8) DISEASES OF THE RESPIRATORY SYSTEM (ICD 460-519)**

- CM122 Pneumonia (except that caused by tuberculosis or sexually transmitted disease)  
 CM123 Influenza  
 CM124 Acute and chronic tonsillitis  
 CM125 Acute bronchitis  
 CM126 Other upper respiratory infections, If yes, specify \_\_\_\_\_  
 CM127 Chronic obstructive pulmonary disease & bronchiectasis, If yes, specify:  
     CM127B COPD otherwise not specified  
     CM127C Emphysema  
     CM127D Chronic bronchitis  
     CM127E Bronchiectasis  
 CM128 Asthma  
 CM304 Pulmonary fibrosis / interstitial lung diseases  
 CM129 Aspiration pneumonitis, food/vomit  
 CM130 Pleurisy, pneumothorax, pulmonary collapse (atelectasis)  
 CM131 Respiratory failure, insufficiency, arrest (adult)  
 CM132 Lung disease due to external agents, including pneumoconioses, e.g., anthracosis, silicosis, asbestosis, berylliosis, siderosis, stannosis, & baritosis.  
 CM133 Other lower respiratory disease  
 CM134 Other upper respiratory disease

**(9) DISEASES OF THE DIGESTIVE SYSTEM (ICD 520-579)**

- CM135 Intestinal infection  
 CM136 Disorders of teeth and jaw  
 CM137 Diseases of mouth, excluding dental  
 CM138 Esophageal disorders  
 CM139 Gastroduodenal ulcer (except hemorrhage)  
 CM140 Gastritis and duodenitis  
 CM141 Other disorders of stomach and duodenum  
 CM142 Appendicitis and other appendiceal conditions  
 CM143 Abdominal hernia, If yes, was it accompanied by obstruction or gangrene? No = 0, Yes = 1.  
 CM144 Regional enteritis and ulcerative colitis, including inflammatory bowel diseases, such as Crohn's disease & ulcerative colitis.  
 CM145 Intestinal obstruction without hernia, e.g., paralytic ileus, impaction, adhesions. If yes, specify \_\_\_\_\_  
 CM146 Diverticulosis and diverticulitis  
 CM147 Anal and rectal conditions  
 CM148 Peritonitis and intestinal abscess  
 CM149 Biliary tract disease, e.g., cholecystitis, cholelithiasis  
 CM150 Liver disease, alcohol-related  
 CM151 Other liver diseases, e.g., liver disease or cirrhosis without mention of alcohol, liver abscess, ascites.  
 CM152 Pancreatic disorders (not diabetes)  
 CM153 Gastrointestinal hemorrhage If yes, specify \_\_\_\_\_  
 CM154 Noninfectious gastroenteritis  
 CM155 Other gastrointestinal disorders, e.g., constipation, dysphagia. If yes, specify \_\_\_\_\_

**(10) DISEASES OF THE GENITOURINARY SYSTEM (580-629)**

- CM156 Nephritis, nephrosis, renal sclerosis, If yes, specify \_\_\_\_\_  
 CM157 Acute and unspecified renal failure  
 CM158 Chronic renal failure  
 CM335 Has the patient had dialysis? If yes, earliest date \_\_\_\_\_ and last date \_\_\_\_\_  
 CM159 Urinary tract infections, If yes, specify if of kidney or cystitis/urethritis : \_\_\_\_\_  
 CM160 Calculus of urinary tract (urolithiasis) If yes, specify if of kidney or ureter or bladder : \_\_\_\_\_  
 What is the composition?: calcium oxalate; uric acid; cystine; struvite = magnesium ammonium phosphate, other, unknown.  
 CM161 Other diseases of kidney and ureters, e.g., hydronephrosis  
 CM162 Other diseases of bladder and urethra  
 CM163 Genitourinary symptoms and ill-defined conditions, e.g., hematuria, dysuria, retention of urine.

**DISEASES OF THE MALE GENITAL ORGANS**

- CM164 Hyperplasia of prostate  
 CM165 Inflammatory conditions of male genital organs, If yes, specify \_\_\_\_\_  
 CM166 Other male genital disorders, If yes, specify \_\_\_\_\_



**DISEASES OF THE FEMALE GENITAL ORGANS**

- CM167 Nonmalignant breast conditions
- CM168 Inflammatory diseases of female pelvic organs, e.g., pelvic peritoneal adhesions, cervicitis / endocervicitis, pelvic inflammatory disease (including endometritis, salpingitis and oophoritis). If yes, specify \_\_\_\_\_
- CM169 Endometriosis
- CM170 Prolapse of female genital organs
- CM171 Menstrual disorders
- CM172 Ovarian cyst
- CM173 Menopausal disorders
- CM174 Female infertility
- CM175 Other female genital disorders

**(11) COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND THE PUERPERIUM (ICD 630-677)**

- CM176 Contraceptive and procreative management
- CM177 Spontaneous abortion
- CM178 Induced abortion
- CM179 Post-abortion complications
- CM180 Ectopic pregnancy
- CM181 Other complications of pregnancy, e.g., genitourinary infection during pregnancy, anemia during pregnancy, mental disorder during pregnancy, missed abortion, hyperemesis gravidarum, infectious/parasitic complications in mother affecting pregnancy. If yes, specify \_\_\_\_\_
- CM182 Hemorrhage during pregnancy, abruptio placenta, placenta previa
- CM183 Hypertension complicating pregnancy, childbirth and the puerperium, e.g., preeclampsian/eclampsia.
- CM184 Early or threatened labor
- CM185 Prolonged pregnancy
- CM186 Diabetes or abnormal glucose tolerance complicating pregnancy, childbirth, or the puerperium
- CM187 Malposition, malpresentation
- CM188 Fetopelvic disproportion, obstruction
- CM189 Previous cesarean section
- CM190 Fetal distress and abnormal forces of labor, e.g., fetal distress, uterine inertia, precipitate labor.
- CM191 Polyhydramnios & other problems of amniotic cavity. e.g., premature rupture of membranes, infection of amnion.
- CM192 Umbilical cord complication
- CM193 Trauma to perineum and vulva
- CM194 Forceps delivery
- CM195 Other complications of birth, puerperium affecting management of mother, e.g., postpartum hemorrhage, cervical incompetence, rhesus isoimmunization, interuterine death, failed induction.
- CM196 Normal pregnancy and/or delivery

**(12) DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE (ICD 680-709)**

- CM197 Skin and subcutaneous tissue infections, e.g., cellulitis or abscess.
- CM198 Other inflammatory condition of skin
- CM199 Chronic ulcer of skin
- CM200 Other skin disorders

**(13) DISEASES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE (ICD 710-739)**

- CM201 Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)
- CM202 Rheumatoid arthritis and related disease
- CM203 Osteoarthritis
- CM204 Other non-traumatic joint disorders (place gout and other crystalline metabolic arthropathic disorders in #54)
- CM205 Spondylosis, intervertebral disc disorders, other back problems
- CM206 Osteoporosis
- CM206B Osteopenia
- CM207 Pathological fracture
- CM208 Acquired foot deformities
- CM209 Other acquired deformities
- CM210 Systemic lupus erythematosus and connective tissue disorders
- CM211 Other connective tissue disease
- CM212 Other bone disease and musculoskeletal deformities
- CM305 Limb amputation, If yes, then check if #254 applies.
- CM339 Hip replacement

**(14) CONGENITAL ANOMALIES (ICD 740-759)**

- CM213 Cardiac and circulatory congenital anomalies**
- CM214 Digestive congenital anomalies**
- CM215 Genitourinary congenital anomalies**
- CM216 Nervous system congenital anomalies**
- CM217 Other congenital anomalies**

**(15) CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD (ICD 760-779)**

- CM218 Liveborn**
- CM219 Short gestation, low birth weight, and fetal growth retardation**
- CM220 Intrauterine hypoxia and birth asphyxia**
- CM221 Respiratory distress syndrome**
- CM222 Hemolytic jaundice and perinatal jaundice**
- CM223 Birth trauma**
- CM224 Other perinatal conditions**

**(16) INJURY / TRAUMA & POISONING (800-999)**

- CM225 Joint disorders and dislocations, trauma-related**
- CM226 Fracture of neck of femur (hip)**
- CM227 Spinal cord injury**
- CM228 Skull and face fractures**
- CM229 Fracture of upper limb**
- CM230 Fracture of lower limb**
- CM231 Other fractures**
- CM232 Sprains and strains**
- CM233 Intracranial injury**
- CM234 Crushing injury or internal injury**
- CM235 Open wounds of head, neck, and trunk**
- CM236 Open wounds of extremities**
- CM237 Complication of device, implant or graft**
- CM238 Complications of surgical procedures or medical care**
- CM239 Superficial injury, contusion**
- CM240 Burns**
- CM241 Poisoning by psychotropic agents**
- CM242 Poisoning by other medications and drugs**
- CM243 Poisoning by nonmedicinal substances**
- CM244 Other injuries and conditions due to external causes**
- CM306 Gunshot injury**

**(17) SYMPTOMS & SIGNS of the index cancer, & ILL-DEFINED CONDITIONS (ICD 780-799)**

CM307A Prior to the index cancer under study, was the patient symptomatic. No=0, Yes=1.

CM307B If symptomatic, what was the duration of symptoms? \_\_\_\_ months.

If symptomatic, complete the table below.

GENERAL	<b>CM245</b> Syncope, fainting <b>CM249</b> Shock <b>CM252</b> Fatigue and malaise, i.e., tiredness, weakness, lethargy <b>CM246</b> Fever, tumor-related or of unknown origin <b>CM308</b> Chills, sweats, night sweats, diaphoresis (excess or profuse perspiration) <b>CM309</b> Weight loss (unintentional) How many pounds were lost? ____, Over how many months? ____. Was weight loss intentional (i.e., due to dieting)? = 0, or was it disease related? = 1
GASTRO- INTESTINAL	<b>CM250</b> Nausea, vomiting, emesis <b>CM310</b> Anorexia, loss of appetite, decreased appetite <b>CM311</b> Heartburn <b>CM336</b> Jaundice, icterus
RESPIRA- TORY / CHEST	<b>CM312</b> Upper respiratory symptoms, epistaxis <b>CM313</b> Throat symptoms, e.g., dysphagia, difficulty swallowing, sore throat, swollen throat, hiccups, choking sensation, hoarseness (rough or harsh quality of voice), dysphonia (any impairment of voice, a difficulty in speaking) <b>CM314</b> Cough <b>CM315</b> Dyspnea, shortness of breath (SOB), exertional dyspnea, orthopnea (inability to breath except in an upright position) <b>CM316</b> Wheezing (i.e., whistling noises, high pitch, made during breathing) or <b>Stridor</b> (a harsh sound, audible without a stethoscope and predominantly inspiratory, often from obstruction) <b>CM317</b> Respiratory congestion <b>CM318</b> Palpitations <b>CM319</b> Hemoptysis (coughing up blood from the respiratory tract) <b>CM320</b> Cyanosis <b>CM321</b> Finger clubbing
PAIN	<b>CM251</b> Abdominal pain <b>CM322</b> Chest pain other than angina <b>CM323</b> Pain of the back <b>CM324</b> Pain of the shoulder <b>CM325</b> Other pain, e.g., arthralgia, neuralgia, pain in extremities.
NODES, MASSES, SWELLINGS	<b>CM247</b> Lymphadenitis <b>CM326</b> Lymphadenopathy or palpable mass or "can feel mass". <b>CM327</b> Swelling / edema
NEURO- MUSCULAR & MENTAL	<b>CM328</b> Headache as a presenting sign/symptom of the index cancer <b>CM329</b> Dizziness <b>CM330</b> Eye / ophthalmic symptoms & signs, e.g., blurred vision, diplopia, photophobia. <b>CM331</b> Dysmetria (improper measuring of distance or range of movement in muscular action) <b>CM338</b> Insomnia <b>CM332</b> Mental changes as a presenting sign/symptom of the index cancer <b>CM333</b> Neurologic symptoms & signs as a presenting sign/symptom of the index cancer
OTHER	<b>CM334</b> Alopecia, hair loss

CM254 Rehabilitation care, fitting of prostheses, and adjustment of devices

**(17) UNCLASSIFIED, continued**

CM259 Residual codes, unclassified

Other: Describe \_\_\_\_\_

[Highest numbers as of Jan 30, 2002 are CM337 (myopia, hyperopia, astigmatism, presbyopia)], 338 Insomnia, 339 hip replacement]